

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method comprising:  
storing routing information mapping destinations to routes within a network;  
storing a set of routing rules;  
receiving a network communication comprising ~~destination information and~~  
a Digital Imaging and Communication in Medicine (DICOM) command with a  
DICOM tag describing patient data an asset;  
comparing at least a portion of the ~~patient data~~ DICOM tag to the set of  
routing rules;  
selecting a route from the routing information based on the DICOM tag  
~~destination information~~ of the network communication and a result of the  
comparison;  
communicating with a device on the route based on the DICOM command;  
receiving results from the communicating with the device on the route based  
on the DICOM command; and  
~~forwarding the network communication according to the selected route~~  
returning the network communication with the results.
2. (Currently Amended) The method of claim 1, ~~where the network comprises a~~  
~~medical imaging network and the network communication complies with the Digital~~  
~~Imaging and Communication in Medicine protocol, and further where storing~~  
routing information comprises storing routing information mapping Application  
Entity Names (AENames) to routes within the medical imaging network.

3. (Original) The method of claim 2, where selecting a route from the routing information comprises comparing an AENAME defined within the network communication to the AENAME defined within the routing information.
4. (Currently Amended) The method of claim 1, ~~where the network communication complies with the Digital Imaging and Communication in Medicine (DICOM) protocol, and further~~ where comparing at least a portion of the ~~medical imaging data~~ DICOM tag comprises:
  - parsing the ~~medical imaging data~~ DICOM tag to identify a set of DICOM tags and corresponding data; and
  - assessing a routing rule from the set of routing rules based on the set of DICOM tags and corresponding data.
5. (Previously Presented) The method of claim 1, where storing a set of routing rules comprises storing an XML-based set of rules, where the rules conform to a user-defined grammar for routing the patient data.
6. (Original) The method of claim 5, further comprising presenting an interface for receiving user input that defines the user-defined grammar.
7. (Currently Amended) A router comprising:
  - a computer-readable medium storing routing information mapping destinations to routes within a medical imaging network, and storing a set of routing rules; and
  - a routing module that selects a route from the routing information based on a Digital Imaging and Communication in Medicine (DICOM) tag destination information of a network communication and a comparison of the patient data DICOM tag describing an asset of the network communication to the set of routing

rules, communicates with and receives results from a device on the route based on a DICOM command and returns the network communication with the results.

8. (Previously Presented) The router of claim 7, where the routing information maps Digital Imaging and Communication in Medicine Application Entity Names (AENames) to routes within the medical imaging network.

9. (Currently Amended) The router of claim 7, where the routing module parses the ~~patient data~~ DICOM tag describing the asset to identify a set of DICOM tags and corresponding data, and assesses the routing rules based on the set of DICOM tags and corresponding data.

10. (Currently Amended) The router of claim 7, where the set of rules includes rules defined by an eXtensible Markup Language (XML), and which conform to a user-defined grammar for routing the ~~patient data~~ DICOM tag describing the asset.

11. (Original) The router of claim 10, further comprising a user interface for presenting an interface for receiving user input that defines the user-defined grammar and the rules.

12. (Currently Amended) A computer-readable medium storing data comprising routing information mapping destinations to routes within a medical imaging network, where the routing information maps Digital Imaging and Communication in Medicine Application Entity Names (AENames) to routes within the medical imaging network, the routes being selected from the routing information based on data of a network communication and a comparison of data describing an asset of the network communication to the set of routing rules.

13. (Previously Presented) The computer-readable medium of claim 12, further storing a set of routing rules, where the set of rules includes rules defined by the

eXtensible Markup Language (XML), and which conform to a user-defined grammar for routing the patient data.

14. (Currently Amended) A computer-readable medium having instructions thereon to cause a programmable processor to:

- store routing information mapping destinations to routes within a medical imaging network;

- store a set of routing rules;

- receive a network communication comprising ~~destination information and a~~ Digital Imaging and Communication in Medicine (DICOM) command with a DICOM tag describing patient data an asset;

- compare at least a portion of the ~~patient data~~ DICOM tag to the set of routing rules;

- select a route from the routing information based on the DICOM tag ~~destination information~~ of the network communication and a result of the comparison;

- communicate with a device on the route based on the DICOM command;

- receive results from the communicating with the device on the route based on the DICOM command; and

- ~~forward the network communication according to the selected route~~

- return the network communication with the results.

15. (Currently Amended) The computer-readable medium of claim 14, ~~where the network communication complies with the DICOM protocol, and further~~ where the instructions cause the processor to store routing information mapping Application Entity Names (AENames) to routes within the medical imaging network.

16. (Original) The computer-readable medium of claim 15, where the instructions cause the processor to compare an AENAME defined within the network communication to the AENAME defined within the routing information.

17. (Currently Amended) The computer-readable medium of claim 16, where the instructions cause the processor to:

parse the ~~patient data~~ DICOM tag to identify a set of DICOM tags and corresponding data; and  
assess the routing rules based on the DICOM tags and corresponding data.

18. (Currently Amended) A method comprising:

receiving user input defining routing information;  
generating a rule in Extensible Markup Language (XML) format based on the routing information;

storing the XML-based rule in a rule set;

receiving a network communication comprising a Digital Imaging and Communication in Medicine (DICOM) command with a DICOM tag describing an ~~asset medical imaging data~~;

assessing the XML-based rule based on at least a portion of the DICOM tag ~~medical imaging data~~;

comparing at least a portion of the DICOM tag to the rule set;

selecting a route from the routing information based on the DICOM tag of the network communication and a result of the assessment and the comparison;

communicating with a device on the route based on the assessment and the comparison;

receiving results from the communicating with the device on the route; and  
~~routing the network communication based on the assessment of the XML-based rule~~

returning the network communication with the results.

19. (Original) The method of claim 18, where the user input defines a grammar for routing medical images within a medical imaging environment.

20. (Original) The method of claim 18, where the user input defines tags including a patient identifier, an imaging modality.

21.-40. (Cancelled).